

Publications

1. C.F. Borges, Trichromatic Approximation Method for Surface Illumination, *Journal of the Optical Society of America A*, Vol. 8, No. 8, August 1991, pp. 1319-1323.
2. C.F. Borges, Trichromatic Approximation for Computer Graphics Illumination Models, *Computer Graphics*, Vol. 25, No. 4, July 1991, pp. 101-104.
3. C.F. Borges, Optimal Spectral Sampling for Color Imaging, *Color Hard Copy and Graphic Arts*, SPIE Vol. 1670, February 1992, pp. 353-358.
4. C.F. Borges, Optimal Point Sampled Spectral Representations for Computer Graphics Illumination Models, in *Compugraphics '92: Proceedings of the Second International Conference on Computational Graphics and Visualization Techniques*, (H. Santo, ed.), (1992), pp. 36-43.
5. C.F. Borges and R. Frezza, On Model Identification of Gaussian Reciprocal Processes from the Eigenstructure of Their Covariances, in *Computation and Control III: Proceedings of the Third Bozeman Conference*, (J. Lund and K. Bowers, eds.), Progress in Systems and Control Theory, Birkha user, (1993), pp. 63-72.
6. C.F. Borges and W.B. Gragg, A Parallel Divide and Conquer Algorithm for the Generalized Real Symmetric Definite Tridiagonal Eigenproblem, in *Numerical Linear Algebra and Scientific Computing*, (L. Reichel, A. Ruttan, and R.S. Varga, eds.), de Gruyter, Berlin, 1993, pp. 11-29.
7. C.F. Borges, On a Class of Gauss-like Quadrature Rules, *Numerische Mathematik*, Vol. 67, No. 3, 1994, pp. 271-288.
8. C.F. Borges and W.B. Gragg, Divide and conquer for generalized real symmetric definite tridiagonal eigenproblems, in *Numerical Algebra: Proceedings of '92 Shanghai International Numerical Algebra and its Applications Conference*, (J. Erxiong, ed.), China Science and Technology Press, Shanghai, 1994, pp. 70-76.
9. C.F. Borges, Numerical Determination of Tristimulus Values, *Journal of the Optical Society of America A*, Vol. 11, No. 12, December 1994, pp. 3152-3161.
10. C.F. Borges, Physical Models, Color, and Perception, in *Proceedings of the First NSF Workshop on Visualization in Earthquake Engineering*, Chico, California, August 1994.
11. C.F. Borges, R. Frezza, and W.B. Gragg, Some Inverse Eigenproblems for Jacobi and Arrow Matrices, *Numerical Linear Algebra with Applications*, Vol. 2, No. 3, 1995, pp. 195-203.
12. C.F. Borges, The (In)Complete Compendium of Computational Curiosities: Givens' Rotations, Technical Report NPS-MA-95-001, January 1995.
13. C.F. Borges and R. Frezza, On Models of Gaussian Reciprocal Processes and the Reconstruction of Periodic Jacobi Matrices, *Journal of Mathematical Systems, Estimation and Control*, vol. 8, no. 1, 1998, pp. 1-22. Summary appears in vol. 8, no. 1, 1998, pp. 131-134.
14. C.F. Borges, On the Estimation of Markov Random Field Parameters, *IEEE Transactions on Pattern Analysis and Machine Intelligence*, vol. 21, no. 3, March 1999, pp. 216-224.
15. C.F. Borges and C.S. Peters, Computing Approximate Stationary Distributions for Discrete Markov Processes with Banded Infinitesimal Generators. *Journal of Applied Probability*, vol. 36, no. 4, December 1999, pp. 1086-1100.
16. E.E. Middlebrook, Bard Mansager, and Carlos F. Borges, A Combat Simulation Analysis of Autonomous Legged Underwater Vehicles. *Military Operations Research*, vol. 5, no. 1, 2000, pp. 17-27.
17. C.F. Borges and T.A. Pastva, Total Least Squares Fitting of Bezier and B-Spline Curves to Ordered Data. *Computer Aided Geometric Design*. To appear.

Books

1. C.F. Borges, Constructive Linear Algebra. A still evolving set of course notes currently used as a textbook for MA1043. This 60+ page book is publicly available in PostScript form via the World Wide Web.